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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/600,923

06/20/2003

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5199-101

6203

7590

12/27/2005

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EXAMINER

HICKS, MICHAEL J

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/600,923		WANG ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Michael J. Hicks		2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/3/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-42 are pending in the instant application.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 20, and 34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 6, 20, and 34, the phrase "or a derivation thereof" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or a derivation thereof"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-42 rejected under 35 U.S.C. 102(b) as being anticipated by Gray, (U.S. Patent Number 6,149,585).

As per Claims 1, 15, and 29 Gray discloses a computerized method, system, and computer-readable medium for flexibly executing a guideline encoded in a format based on a guideline representation model (i.e. "...a diagnostic enhancement program is provided that when executed performs a diagnostic enhancement method. With this method, a presenting problem is received by the system. Responsive to the presenting problem, particular patient data is then collected. Next, based on criteria applied to the patient data, a plurality of possible diagnoses is presented for selection by a user. After the user selects a diagnosis, the system provides a recommended diagnostic task based on the selected possible diagnosis...Among other things, the guidelines are used to determine which patient data should be elicited in response to the particular presented problem." The preceding text excerpt clearly indicates that a method of diagnosis/guideline is executed which is encoded in a format based on a guideline representation model (e.g. a program which directs a users through guidelines).) (Figure 18, Item 466; Column 1, Lines 60-67; Column 5, Lines 27-29), comprising: retrieving a trace record for an instance of the guideline being executed (i.e. "FIG. 9 shows a work queue page. Note that the right portion of the screen remains blank until a hypertext option is chosen. The depicted options include Referrals 409, Cases in Process 411, Clinical Findings 413, Case Errors 415, Case Archives 417, Initiate Case 419, Member Inquiry 421, Provider Inquiry 423, Practitioner Inquiry 425, and Exit RadWise System 429. For purposes of this example, assume that Member Inquiry 421 is selected by the user. This option is selected to create a new case for an existing member. Conversely, Initiate Case 419 would be selected for the creation of a case for a new member...A patient record is selected by either entering appropriate text into a search field 445 or pressing search button 444, or simply by highlighting an identified patient cell from table 443 and pressing search button 444. The user may also update patient demographics from this table...At this point, the user selects "Guideline" at 466 to proceed with the program. Here, the user will normally be the physician identified in the previously defined Encounter who will collect and enter into the system physical examination data from the patient. FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already

collected. The Guideline Questions field 463 displays questions to be completed by the examining physician." The preceding text excerpt clearly indicates that once a user has logged in and selected the appropriate patient, a case record/guideline summary/trace record is retrieved to make available information for the case/guideline instance which is being executed.) (Figures 9, 11, 18-19; Column 8, Lines 33-40, 53-60; Column 9, Lines 37-47), the trace record comprising an execution history for the instance of the guideline being executed (i.e. "FIG. 9 shows a work queue page. Note that the right portion of the screen remains blank until a hypertext option is chosen. The depicted options include Referrals 409, Cases in Process 411, Clinical Findings 413, Case Errors 415, Case Archives 417, Initiate Case 419, Member Inquiry 421, Provider Inquiry 423, Practitioner Inquiry 425, and Exit RadWise System 429... FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician." The preceding text excerpt clearly indicates that the trace record includes a guideline summary/execution history for the case/guideline instance.) (Figures 9, 18-19; Column 8, Lines 33-40; Column 9, Lines 37-47); and recommending to a user a guideline step for execution based on the execution history of the guideline instance (i.e. " FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician. Data from these questions will continue to collect in the center of this screen in the Guideline Summary 464. With the system of the depicted embodiment, if the physician has any doubts or concerns regarding the accuracy of the previously answered questions, she may select the appropriate hypertext caption under the Guideline Summary 464 to review the particular questions. For example, if the user selects "Signs & Symptoms--Other" at 462, the screen of FIG. 20 appears and displays the corresponding questions 465 under the Guideline Questions at 463. FIG. 21 shows the next screen, which displays the list of Possible Diagnoses 469. This page corresponds to step 230 in routine 200. Symptom hit data for each diagnosis within this list appears in Column 471... FIG. 22 shows the next screen, which provides the recommended diagnostic task, which corresponds to step 250 in routine 200. Upon selecting a

*possible diagnosis, a "Recommendation" screen appears. The user can choose to accept the system recommendation task at 476 or create a different service record (self-defined task) at 478. In this example, the recommended diagnostic task is an MRI of the brain."* The preceding text excerpt clearly indicates that based on the execution history of the guideline instance (e.g. if the execution history indicates that the patient data has been collected for this patients diagnosis), the system will recommend a guideline step (e.g. providing a list of possible diagnoses and indicating one as a recommended diagnosis).) (Figures 19-22; Column 8, Lines 42-59, Column 10, Lines 9-18).

As per Claims 2, 16, and 30, Gray further discloses the execution history of the guideline instance indicates that a guideline step had not previously been executed, the method comprising recommending at least one unexecuted guideline step (i.e. "For purposes of this example, assume that Member Inquiry is selected by the user. This option is selected to create a new case for an existing member. Conversely, Initiate Case would be selected for the creation of a case for a new member. FIG. 10 shows the next appearing screen. This screen displays a list of presenting problems --one of which is to be selected by a user." The preceding text excerpt clearly indicates the execution history of the guideline instance is capable of indicating that a step (e.g. selecting a presenting problem) has not been previously executed and then recommending the unexecuted guideline step (e.g. presenting a list of presenting problems for the user to choose from).) (Column 8, lines 34-47).

As per Claims 3, 17, and 31, Gray further discloses the execution history of the guideline instance indicates a patient's current management state (i.e. "...a list of possible diagnosis is retrieved from the broad set of potential diagnoses based on predetermined criteria linking observed patient data and particular diagnoses." The preceding text excerpt clearly indicates that the current management state of the patent (e.g. undiagnosed) is indicated in the guideline instance

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execution history.) (Column 5, Lines 48-51), the method comprising recommending at least one guideline step based on the patient's management state (i.e. *"Initially, a recommended task, responsive to the selected possible diagnosis, is presented to the user."* The preceding text excerpt clearly indicates that a recommended task/guideline step is recommended based on the patients diagnosis/management step.) (Column 6, Lines 53-54).

As per Claims 4, 18, and 32, Gray further discloses retrieving at least one patient record, and recommending a guideline step based on data provided by the patient record (i.e. *"...based on evaluation of the presenting problem and/or the collected patient data, the system presents a list of possible (or probable) diagnoses to the user for his/her selection of a first diagnosis."* The preceding text excerpt clearly indicates that collected patient data/at least one patient record is collected and a guideline step (e.g. diagnosis) is recommended based on the patient data/record.) (Column 3, Lines 53-56).

As per Claims 5, 19, and 33, Gray further discloses the execution history of the guideline instance indicates an execution state with regard to the guideline instance, the method comprising recommending at least one guideline step based on the execution state (i.e. *" FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician. Data from these questions will continue to collect in the center of this screen in the Guideline Summary 464. With the system of the depicted embodiment, if the physician has any doubts or concerns regarding the accuracy of the previously answered questions, she may select the appropriate hypertext caption under the Guideline Summary 464 to review the particular questions. For example, if the user selects "Signs & Symptoms--Other" at 462, the screen of FIG. 20 appears and*

*displays the corresponding questions 465 under the Guideline Questions at 463. FIG. 21 shows the next screen, which displays the list of Possible Diagnoses 469. This page corresponds to step 230 in routine 200. Symptom hit data for each diagnosis within this list appears in Column 471... FIG. 22 shows the next screen, which provides the recommended diagnostic task, which corresponds to step 250 in routine 200. Upon selecting a possible diagnosis, a "Recommendation" screen appears. The user can choose to accept the system recommendation task at 476 or create a different service record (self-defined task) at 478. In this example, the recommended diagnostic task is an MRI of the brain."* The preceding text excerpt clearly indicates that based on an indication from the execution history of the guideline instance of an execution state (e.g. the execution history indicates that the patient data has been collected for this patients diagnosis), the system will recommend a guideline step based on the execution state (e.g. in response to completion of the patient data entry, the system recommends the step of diagnosis.) (Figures 19-22; Column 8, Lines 42-59, Column 10, Lines 9-18).

As per Claims 6, 20, and 34, Gray further discloses the guideline representation model comprises a GLIF model or a derivation thereof (i.e. *"At this point, the guidelines are then incorporated into the diagnostic enhancement system as: (a) guides for patient data collection; and (b) logical engines for linking symptoms/patient data to diagnoses."* The preceding text excerpt clearly indicates that because the GLIF model was described to be a representation model for guidelines for use on a computer system, and the present system clearly has guidelines modeled in it, the present system can be said to have and use at least a GLIF derived representation model.) (Column 5, Lines 17-20).

As per Claims 7, 21, and 35, Gray further discloses communicating the recommended step to a clinical application selected from a group consisting of a physician order entry, a clinical event monitors, and a notification system (i.e. *"...the system posts an accepted diagnostic task, which may be a recommended task from or a self-defined task*



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*from. Posting each accepted task is necessary in order to initiate its performance and later process its results...In this manner, when a patient is diagnosed using system by a first user or users in a first location (e.g., a local clinic), a second user (e.g., radiologist) in a wholly different location can perform the posted diagnostic task, as specified by the first user, with all of the patient's relevant data conveniently at the disposal of the second user."* The preceding text excerpt clearly indicates a recommended diagnostic task/recommended step is posted/communicated to a clinical application in the form of a notification system (e.g. the task is posted to the system in order to notify the radiologist of the task and the patients current data.) (Column7, Lines 24-36).

As per Claims 8, 22, and 36, Gray further discloses receiving a notice of a clinical event, and updating at least one of a trace record, an event record, and a patient record, to reflect the clinical event (i.e. "... *the results of the task are received, stored and processed by the system. These results could be test data results, or they could be diagnostic to conclusions or finding codes, as determined by the user who performed the diagnostic task. For example, if the purpose of the task was to confirm a selected (or suspected) diagnosis, the task performer, e.g., radiologist, could report to the system whether or not the suspected diagnosis was confirmed and if not, whether a different pathology was detected... the results are stored in database, and any dependent values are updated. These dependent values could include performance parameters for evaluating system users, statistical or weighting values used in selecting diagnoses, and any other values used in the various processes of routine. In this manner, the system is capable of monitoring and evaluating the performance and efficiency of the diagnostic process. In addition, the guidelines and recommended tasks may be revised in response to these results in order to improve the operation of the overall system."* The preceding text excerpt clearly indicates that a notice is received of the completion of a recommended task/clinical event and the results of the event, which include a new patient record are updated in database. Note also that an event record is posted to the system/updated and that the trace record of the

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guideline is also updated allowing the guideline to take into consideration the new results.) (Column 7, Lines 50-67; Column 8, Lines 1-8).

As per Claims 9, 23, and 37, Gray further discloses triggering a guideline step for execution based on the occurrence of the clinical event (i.e. *"Based on the diagnostic results, the user can choose to make a second diagnosis, which may be the same as the first diagnosis (confirmation) or be different."* The preceding text excerpt clearly indicates that in response to receiving the results of the diagnostic test/clinical event a guideline step of confirmation or re-diagnosis is triggered.) (Column 4, Lines 19-21).

As per Claims 10, 24, and 38, Gray further discloses the trace record maintains the history for the instance of the guideline being executed for a particular patient (i.e. *"This particular page includes a Member (e.g., patient) Demographics Table from which a user selects an existing patient record. A patient record is selected by either entering appropriate text into a search field or pressing search button, or simply by highlighting an identified patient cell from table and pressing search button. The user may also update patient demographics from this table...Note that a running tabulation of some of the already-entered, pertinent data is displayed on the left side of the screen in a case recap field at. A "Case Summary Report" link enables a user to display entered data for a selected (highlighted) "encounter?" on the screen. FIG. 29, which will be addressed later, depicts the screen when the "Case Summary Report" link is selected."* The preceding text excerpt clearly indicates that the trace record maintains a history for each specific guideline instance run for each particular patient.) (Figure 29; Column 8, Lines 57-61; Column 9, Lines 8-14).

As per Claims 11, 25, and 39, Gray further discloses receiving an indication to override the recommended step and a selection to execute an alternate step of the

guideline (i.e. *"At this point, the user may either accept or reject the recommended diagnostic task at 260. If the user declines the recommended task, he/she is then given the option to self-define and/or enter into the system a different task (along with an explanation, in some cases)..."*). The preceding text excerpt clearly indicates the user may enter an indication to reject/override the given step and may then either enter a self defined step or enter/execute a different/alternate task.) (Column 3, Lines 60-64).

As per Claims 12, 26, and 40, Gray further discloses receiving an indication to stop a recommended step and updating the trace record to indicate that the recommended step has been placed in an inactive state (i.e. *"Next, in FIG. 24, the system then elicits the particular service provider. In this case, a particular radiology group is selected for the accepted diagnostic task (performance of the MRI on the patient's brain). FIG. 25 shows the next screen, which enables the user to confirm its posting of the recommended task. In this screen, a summary of the particular requested service and service providers are presented. At this point, the first user (or users corresponding to the primary care physician) has completed the initial portion of interacting with the system. The case record (which includes relevant patient history and physical examination data) for Tracy P. Nelson's "headache" encounter has been generated, and the accepted, recommended diagnostic task has been posted, in this case, to be performed by a separate user other than the examining physician. The next phase of diagnosis and interaction with the system will occur with this separate user, i.e. radiology group."*). The preceding text excerpt clearly indicates that the next step after posting the service record to the system would be to perform the MRI (e.g. a recommended step). Because this will most likely not happen immediately, especially because the person performing the MRI is at a second location, the recommended step of performing the MRI must be stopped and placed in an inactive state in the work queue/guideline summary/trace record (e.g. the record has been posted to the system and will be continued at a later date).) (Figures 24-25; Column 10, lines 45-61).

As per Claims 13, 27, and 41, Gray further discloses receiving an indication to start a step and updating the trace record to indicate that the recommended step has been placed in an active (i.e. "Assume that a user from the radiology group has logged onto the system and is now at the "Work Queue" screen, which is shown in FIG. 26. This is the same screen that appeared before in FIG. 9 for the first user; however, this time, the user (i.e., radiologist) will select Referrals. FIG. 27 shows the next screen, which is the "Work Queue-Referrals" screen. This screen includes a table of patient records for patients who have been provided by notice to this radiology group (i.e., "Radical Radiologists"). Table 479 includes a column of patient names, which as can be seen includes our exemplary patient: Tracy P. Nelson...At this point, the radiology group has chosen a particular radiologist, Randy Tesla, to perform the MRI task. FIG. 29 shows the work queue screen once again; this time, however, it is being accessed by Mr. Tesla, and he selects Cases In Process in connection with performing the task. As may be apparent from the name, this option enables a user to review previously-generated cases that have not yet been completed." The preceding text excerpt clearly indicates that after the second physician logs in and examines the case, an indication is received to activate the inactive step in the trace record and the step is placed in an active state. In this case, the steps pertaining to performing the MRI were placed in an inactive state until reactivation due to the second physician sending an indication to start them by logging on and continuing the examination.) (Figures 9, 26-27, 29; Column 10, lines 62-67; Column 11, Lines 1-5, 15-22).

As per Claims 14, 28, and 42, Gray discloses a computerized method, system and computer-readable medium for flexibly executing a guideline encoded in a format based on a guideline representation model (i.e. "...a diagnostic enhancement program is provided that when executed performs a diagnostic enhancement method. With this method, a presenting problem is received by the system. Responsive to the presenting problem, particular patient data is then collected. Next, based on criteria applied to the patient data, a plurality of possible diagnoses is presented for selection by a user. After the user selects a diagnosis, the system provides a recommended

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*diagnostic task based on the selected possible diagnosis...Among other things, the guidelines are used to determine which patient data should be elicited in response to the particular presented problem."* The preceding text excerpt clearly indicates that a method of diagnosis/guideline is executed which is encoded in a format based on a guideline representation model (e.g. a program which directs a users through guidelines).) (Figure 18, Item 466; Column 1, Lines 60-67; Column 5, Lines 27-29), comprising: retrieving a trace record for an instance of the guideline being executed (i.e. "FIG. 9 shows a work queue page. Note that the right portion of the screen remains blank until a hypertext option is chosen. The depicted options include Referrals 409, Cases in Process 411, Clinical Findings 413, Case Errors 415, Case Archives 417, Initiate Case 419, Member Inquiry 421, Provider Inquiry 423, Practitioner Inquiry 425, and Exit RadWise System 429. For purposes of this example, assume that Member Inquiry 421 is selected by the user. This option is selected to create a new case for an existing member. Conversely, Initiate Case 419 would be selected for the creation of a case for a new member...A patient record is selected by either entering appropriate text into a search field 445 or pressing search button 444, or simply by highlighting an identified patient cell from table 443 and pressing search button 444. The user may also update patient demographics from this table...At this point, the user selects "Guideline" at 466 to proceed with the program. Here, the user will normally be the physician identified in the previously defined Encounter who will collect and enter into the system physical examination data from the patient. FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician." The preceding text excerpt clearly indicates that once a user has logged in and selected the appropriate patient, a case record/guideline summary/trace record is retrieved to make available information for the case/guideline instance which is being executed.) (Figures 9, 11, 18-19; Column 8, Lines 33-40, 53-60; Column 9, Lines 37-47), the trace record comprising an execution history for the instance of the guideline being executed (i.e. "FIG. 9 shows a work queue page. Note that the right portion of the screen remains blank until a hypertext option is chosen. The depicted options include Referrals 409, Cases in Process 411, Clinical Findings 413, Case Errors

415, Case Archives 417, Initiate Case 419, Member Inquiry 421, Provider Inquiry 423, Practitioner Inquiry 425, and Exit RadWise System 429... FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician." The preceding text excerpt clearly indicates that the trace record includes a guideline summary/execution history for the case/guideline instance.) (Figures 9, 18-19; Column 8, Lines 33-40; Column 9, Lines 37-47, the execution history indicating at least one of a patient's current management state and an execution state with regard to the guideline instance (i.e. "...a list of possible diagnosis is retrieved from the broad set of potential diagnoses based on predetermined criteria linking observed patient data and particular diagnoses." The preceding text excerpt clearly indicates that the current management state of the patent (e.g. undiagnosed) is indicated in the guideline instance execution history.) (Column 5, Lines 48-51); recommending to a user a guideline step for execution based on the execution history of the guideline instance (i.e. " FIG. 19 shows the next page. It includes an updated, Guideline Summary 464, which shows the patient data already collected. The Guideline Questions field 463 displays questions to be completed by the examining physician. Data from these questions will continue to collect in the center of this screen in the Guideline Summary 464. With the system of the depicted embodiment, if the physician has any doubts or concerns regarding the accuracy of the previously answered questions, she may select the appropriate hypertext caption under the Guideline Summary 464 to review the particular questions. For example, if the user selects "Signs & Symptoms--Other" at 462, the screen of FIG. 20 appears and displays the corresponding questions 465 under the Guideline Questions at 463. FIG. 21 shows the next screen, which displays the list of Possible Diagnoses 469. This page corresponds to step 230 in routine 200. Symptom hit data for each diagnosis within this list appears in Column 471... FIG. 22 shows the next screen, which provides the recommended diagnostic task, which corresponds to step 250 in routine 200. Upon selecting a possible diagnosis, a "Recommendation" screen appears. The user can choose to accept the system recommendation task at 476 or create a different service record (self-defined task) at 478. In this example, the recommended diagnostic task is an MRI of

*the brain.*" The preceding text excerpt clearly indicates that based on the execution history of the guideline instance (e.g. if the execution history indicates that the patient data has been collected for this patients diagnosis), the system will recommend a guideline step (e.g. providing a list of possible diagnoses and indicating one as a recommended diagnosis.) (Figures 19-22; Column 8, Lines 42-59, Column 10, Lines 9-18); receiving at least one of: an indication to override the recommended step and a selection to execute an alternate step of the guideline, an indication to stop a recommended step, and an indication to start a step (i.e. *"At this point, the user may either accept or reject the recommended diagnostic task at 260. If the user declines the recommended task, he/she is then given the option to self-define and/or enter into the system a different task (along with an explanation, in some cases)..."* The preceding text excerpt clearly indicates the user may enter an indication to reject/override the given step and may then either enter a self defined step or enter/execute a different/alternate task/step of the guideline.) (Column 3, Lines 60-64); and updating the trace record according to the received indication (i.e. *"...the system posts an accepted diagnostic task, which may be a recommended task from or a self-defined task from. Posting each accepted task is necessary in order to initiate its performance and later process its results."* The preceding text excerpt clearly indicates that the system (e.g. the trace record) updated to reflect that the self defined task/received indication is being performed.) (Column 7, Lines 24-28).

### ***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Hicks whose telephone number is (571) 272-2670. The examiner can normally be reached on Monday - Friday 8:30a - 5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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